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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/877,684	06/17/1997	GEORGE ALAN VAUGHAN	96B035/2	6303

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EXAMINER

PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
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1755

39

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
08/877,684

Applicant(s)
Vaughan et al.

Examiner
J. Pasterczyk

Art Unit
1755



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 17, 2003
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 6, 13, 17-20, 22-27, 30, and 33-42 is/are pending in the application.
- 4a) Of the above, claim(s) 22-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 13, 17-20, 30, and 33-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1, 6, 13, 17-20, 22-27, 30, and 33-42 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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1. This Office action is in response to the amendment filed 3/17/03 and refers to the rejection mailed 12/19/02.

2. Due to the wholesale revision of the independent claims, the only claims now not under consideration are claims 22-27, though those may be rejoined upon allowability of the other claims. Also due the wholesale revision of the independent claims, the bulk of the prior art rejections as well as the bulk of the prior art is withdrawn with the exception of Brookhart, Drent, and Johnson.

3. Claims 1, 6, 13, 17-20, 30 and 33-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 1, 6 and 13, I. 3, "a catalyst precursor" lacks antecedent basis; in each claim, I), (b), (iv), now that the meaning of "covalent" has been clarified, it is not clear what "depending on the valency of E" means in this context. In III) of each, "said late transition metal" lacks antecedent basis since they are recited as being group 9-11 metals only. In claim 13, part (v), change "the oxidation state of MX_n is satisfied" to that wording used in the other two independent claims.

In claim 17, insert indefinite pronouns before "alkylalumoxane", "modified alkylalumoxane", "aluminum alkyl", "aluminum alkyl halide", and "aluminum halide".

In claim 33, "the particle support" lacks antecedent basis since it is recited above as a solid support.

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In claim 34, it makes no sense that a supported catalyst be homogeneous since to be homogeneous requires the catalyst and the solvent be in the same phase.

In claim 35, change "metal complex" to --metal M of the catalyst precursor--, insert --transition-- after "first row", and delete "complex" at the end of the claim.

In claim 36 it is not clear what is meant by a "bridging element"; is this the same as A? Isn't this a "bridging group" as recited in the independent claims?

In claim 37, it is not clear if "further comprising" now refers to a cocatalyst in addition to that of claim 17. Likewise with claim 38 and "the organoaluminum compound".

In claim 40, "the metal cation" lacks antecedent basis.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 6, 13, 17-20, 30 and 33-42 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brookhart as cited in paragraph 9 of the previous Office action.

Applicants' main argument against Brookhart appears to be that this reference does not clearly teach or disclose that the metal compound is "immobilized" on the support material. However, the transition metal precatalysts of Brookhart are in fact supported on the supports it discloses, and no evidence has been adduced that would give a different meaning to "immobilized" than what is disclosed in Brookhart, hence the prior art appears to inherently

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disclose what is presently claimed. The present claims are not necessarily limited to a catalyst for use in gas phase catalysis; supported catalysts can also be used in slurry phase polymerizations.

6. Claims 1, 6, 13, 17-20, 30 and 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Johnson or Drent in view of Brookhart as cited in and for the reasons of record given in paragraph 12 of the previous Office action.

Applicants' main argument appears to be that the catalyst arts are notoriously unpredictable, and that thus the burden is on the PTO to come forth with evidence that the combination would afford a workable catalyst. However, it has long been recognized that the PTO is not equipped to perform experiments of any kind, hence it has always been the burden of applicants to show that their invention is patentably distinct from the prior art.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached on (703) 308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for normal faxes, 872-9311 for after final faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700



J. Pasterczyk

4/9/03